

CHARACTERS OF NEW LAND AND FRESHWATER SHELLS  
FROM THE NAGA HILLS, ASSAM.

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*Read 9th January, 1914.*

AUSTENIA TIGRIS, n.sp.

Shell elongately ovate, rather flat, polished, shining, spirally rayed with bands of a darker colour, which are especially noticeable on the upper part of the last whorl and on the base of the shell; whorls 2, the first very small, pale yellowish-white, the last rapidly increasing in size, rather coarsely marked with radiate lines of growth, and



somewhat malleated; suture impressed; labrum thin, membranaceous; aperture auriform; interior of shell slightly nacreous in places. Alt. 11, diam. maj. 31, min. 19 mm. Aperture: alt. 19, diam. 24 mm.

*Hab.*—Naga Hills, Assam.

ÆGISTA COENI, n.sp.

Shell broadly turbinate, dark reddish-brown; whorls 6, regularly increasing, not very convex, marked with closely set, oblique growth striæ; base of shell also marked with lines of growth, and very finely



spirally striate; suture well impressed; umbilicus wide, deep; columella whitish, diaphanous, rather broadly outwardly expanded above, obliquely descending; labrum not thickened, narrowly

reflexed; aperture obliquely sub-circular. Alt. 6, diam. maj. 9·5, min. 8·25 mm. Aperture: alt. 3, diam. 3 mm.

*Hab.*—Naga Hills.

*ÆGISTA* CONGENER, n.sp.

Shell differing from *Helix* (*Ægista*) *mitanensis*, Godwin-Austen,<sup>1</sup> in its broader and less elevated form, less angled periphery, and much wider umbilicus. Alt. (of type-specimen) 7, diam. maj. 12, min. 10 mm. Aperture: alt. 4·25, diam. 3·5 mm.



*Hab.*—Naga Hills.

The specimens of this shell which I have before me vary considerably in diameter.

*VIVIPARA* NAGAENSIS, n.sp.

Shell globosely turbinate, rimate, dark olive; whorls 5, regularly increasing, convex, painted with narrow, transverse stripes of reddish-brown, sculptured with fine, spiral and wavy, transverse striæ, suture well impressed; umbilicus reduced to a mere chink; labrum very



slightly reflexed, black, the margins joined by a light blackish callus; columella descending in a slight curve; interior of shell bluish; operculum thin, laminiferous, with excentric, depressed nucleus. Alt. 28, diam. maj. 22, min. 20 mm. Aperture: alt. 15·5, diam. 11 mm.

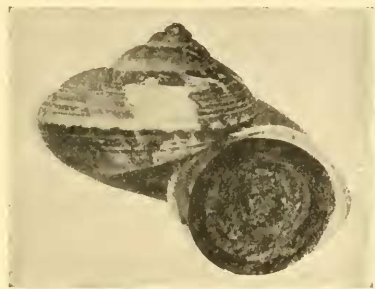
*Hab.*—Naga Hills.

*CYCLOPHORUS* AUSTENIANUS, n.sp.

Shell acutely turbinate, somewhat thin, strongly carinate at the periphery, pale reddish-brown, painted on the upper whorls with

<sup>1</sup> Ann. Mag. Nat. Hist., London (6), vol. iii, p. 108, 1889.

broad, zigzag flame-markings of dark chestnut, and with a broad, spiral band, or group of bands, on the base immediately below the peripheral keel; whorls 5, rapidly increasing, sculptured above with fine, closely set, spiral riblets, some of which coarsen into liræ below, crossed by very oblique, closely set, transverse striæ, which give the shell, especially on the upper half of the whorls, a finely granular appearance; base of shell sculptured with fine, wavy, revolving striæ and moderately fine liræ, which become obsolete in the umbilical



area; suture well impressed, incised, and slightly overhung below; umbilicus somewhat wide, deep; columella descending in a curve, a very thick, polished, transparent callus uniting it with the lip above, just behind its junction with the parietal wall; labrum white, thickened, laminiferous, rather narrowly expanded and reflexed; aperture sub-circular; interior of shell whitish, smooth, polished, showing the spiral liræ and dark, sub-peripheral bands through the test; operculum slightly concave, laminiferous, with central nucleus, having 7-8 whorls. Alt. 35.5, diam. maj. 42, min. 32.5 mm. Aperture: alt. 19.5, diam. 20 mm.

*Hab.*—Naga Hills.

#### CYCLOPHORUS BEDDOMEANUS, n.sp.

Shell large, turbanate, with rather acute apex, thin, yellowish, with one broad, super-peripheral, blackish-brown band and a broad sub-peripheral band, immediately below which are two narrow bands of the same colour on the last whorl, the earlier whorls being reddish-brown, mottled with yellowish-grey; whorls 5, the last two rapidly increasing, sculptured with irregular lines of growth, crossed by rather broad, but flat, spiral ridges, the last whorl carinate at the periphery; suture incised, narrowly margined above; umbilicus moderately broad, deep; labrum continuous, somewhat thickened, but not reflexed, crimson; aperture large, sub-circular; interior of shell glossy, smooth, polished, bluish, the colour-bands being visible through the test; operculum laminiferous, with central nucleus,

having about 8 convolutions. Alt. 44, diam. maj. 53·75, min. 40 mm. Aperture: alt. 24, diam. 25 mm.



*Hab.*—Naga Hills.

A white-lipped variety also occurs which is otherwise indistinguishable from the type.

*PTEROCYCLUS MARIONÆ*, n.sp.

Shell somewhat orbicular, moderately depressed, covered with a thin, laminiferous, reddish-brown periostracum; whorls  $4\frac{1}{2}$ , regularly increasing, the last very obtusely angled at the periphery, and possessing a short, but rather broad, wing-like development just behind the labrum; suture very deeply impressed; umbilicus wide, deep; labrum reflexed, white, laminiferous, continuous but for a slight



break below the wing-like projection; aperture circular; operculum corneous, convex above, with central nucleus, bearing several raised, more or less foliaceous laminae, which are especially strong towards the outer margin, below concave, polished, shining. Alt. 8, diam. maj. 20, min. 15 mm. Aperture: alt. 7, diam. 7 mm.

*Hab.*—Naga Hills.

*ALYCÆUS (CHARAX) PEILEI*, n.sp.

Shell irregularly discoidal, moderately depressed, white; whorls 4, the last gibbous, thin, strongly strangulated, and again becoming gibbous just behind the labrum, sculptured with fine, somewhat

distant, transverse, arcuate striæ, which become closely crowded on the last whorl; suture rather deeply impressed; tube about 3 mm. in length; umbilicus rather widely ovate, deep; columella obliquely curved; labrum continuous, double above, treble below, erect, sinuous,



having two notches, one broad in front, the other narrower above; aperture irregularly sub-circular. Alt. 4, diam. maj. 6.5, min. 5.5 mm. Aperture: alt. 1.5, diam. 1.75 mm.

*Hab.*—Naga Hills.

*DIPLOMMATINA FRUMENTUM*, n.sp.

Shell fusiform with acute apex, pale-yellowish horn-colour, somewhat shining; whorls 8, the first six regularly increasing, the seventh broad and convex, the eighth swollen, but smaller, sculptured with fine transverse striæ; suture impressed; columella descending



vertically, bearing a rather fine, oblique plait situated well within the aperture, and diffused above into an arched, well-defined callus, which joins the upper margin of the labrum, and which is obliquely furrowed in the middle; labrum whitish, broad, somewhat thickened,

reflexed; aperture subquadrilateral. Alt. 6·5, diam. maj. 3, min. 2·75 mm. Aperture: alt. 1·5, diam. 1 mm.

*Hab.*—Naga Hills.

DIPLOMMATINA FALLAX, n.sp.

Shell a miniature of *D. frumentum*, Preston, but rather lighter in colour, and with much coarser sculpture, the parietal callus is broader and less arched, and is furrowed at its junction with the margin of



the labrum, the columella is more arched and has a rather coarser plait; the aperture also is rather sub-circular than quadrilateral, as in that species. Alt. 4·5, diam. maj. 2 mm. Aperture: alt. ·75, diam. ·75.

*Hab.*—Naga Hills.